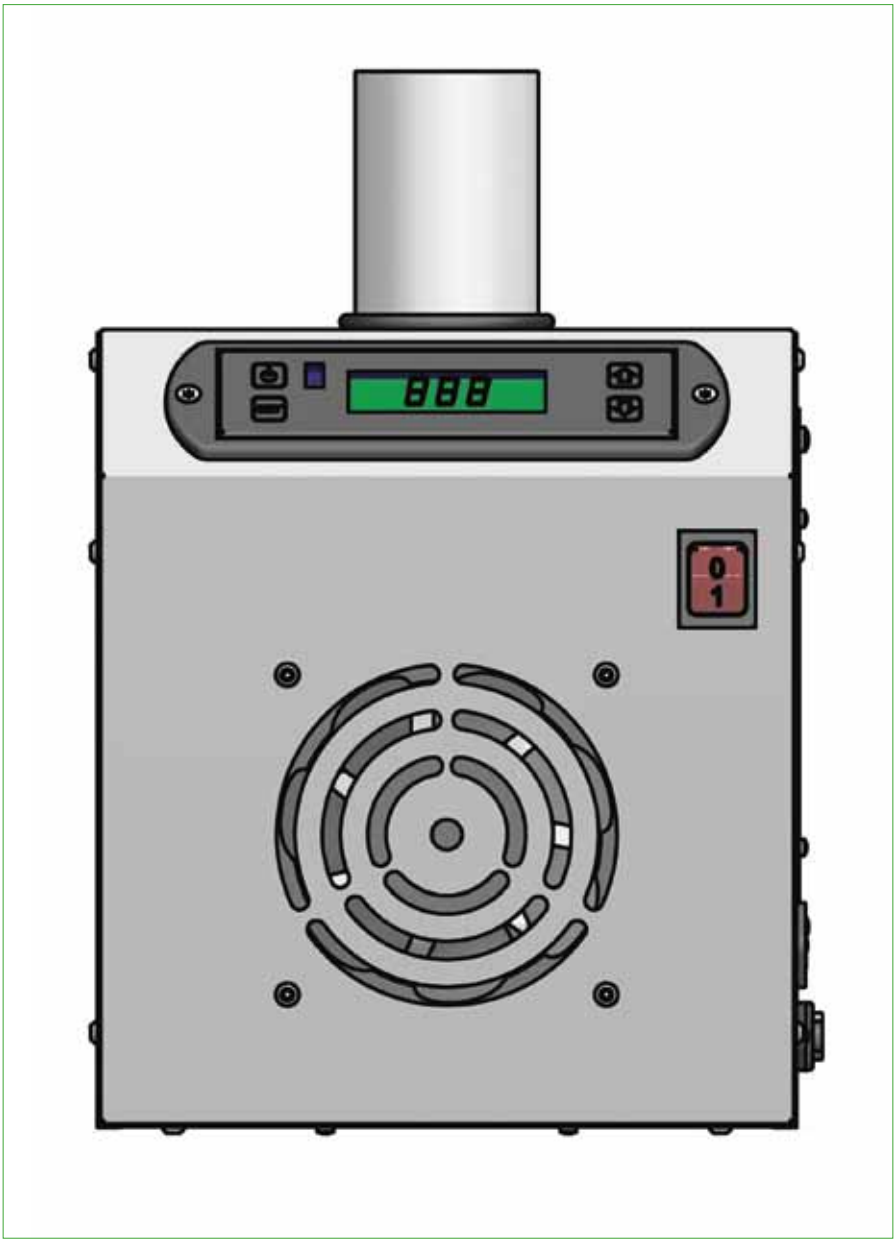
INSTRUCTION AND MAINTENANCE MANUAL

B - HOME



max technology
GREEN HEATING SOLUTIONS

ELMEC GROUP S.R.L.
Loc. Ca' d'Oro • 36020 • Asigliano Veneto (VI)
ITALY

Tel + 39 0444 772023
Fax +39 0444 773129
Mail info@b-max.com
Web www.b-max.com

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SYMBOLS AND TERMINOLOGY USED IN THE MANUAL

SYMBOL	MEANING
	THIS SYMBOL PROVIDES USEFUL INFORMATION FOR THE SAFE USE OF THE APPLIANCE
	THIS SYMBOL INDICATES THE SAFETY MEASURES AND WARNINGS FOR THE USER AND/OR THE EXPOSED PEOPLE

1. GENERAL WARNINGS

1.1 INTRODUCTION

The following manual is property of Elmec Group S.r.l.; the contents of this document may not be reproduced or disclosed to third parties. All rights are reserved.
The machinery is not intended to be used in environments with a potentially explosive atmosphere.
This manual is an integral part of the product, the owner must ensure that it is always supplied with the machinery, even in the case of sale/transfer to another owner, so that it may be studied by the user or by the authorized personnel for maintenance and repairs.
Read the instruction manual carefully before using the burner.
The installation of the burner must comply with the instructions in this instruction manual.
Follow the guidelines and instructions in this instruction manual to ensure safe operation of the device and of the system. In case of doubts concerning the conditions and/or working of the burner and of the associated equipment, please contact your local distributor for more assistance. The system of the burner must be installed by authorized technical personnel, trained by the manufacturer/importer. The improper installation of the system can invalidate the warranty.

1.2 GENERAL AND SAFETY WARNINGS

- The installation of the burner must comply with the instructions in this manual. Follow the guidelines and instructions in this manual to ensure safe operation of the device and of the system. In case of doubt concerning the conditions and/or working of the burner and of the associated equipment, please contact your local distributor for more assistance. The system of the burner must be installed by authorized technical personnel, trained by the manufacturer/importer. The improper installation of the system can invalidate the warranty.
- Before starting up the system, the user must consult and follow local laws and regulations regarding construction.
- The seller is not responsible for the installation of devices which do not comply with current laws, nor for its use without the necessary permits

• The burner is packaged in a standard cardboard box, therefore, during transportation, it must be handled according to the guidelines on the packaging. The device, during transportation, must be protected against adverse weather conditions, impacts and damages. Any improper loading, unloading or handling of the product might damage it.
• Perform a functional testing of the device in case of any damage to the packaging. In case of faulty operation (noisy operations, friction) or any other defect, contact your nearest authorized dealer to perform the necessary repairs and maintenance. In case of courier service, inspect the packages at the reception for any damage. Immediately report to the supplier or courier charged with the delivery of the product any faults discovered and problems.
• Consult the local safety regulations in force for heating devices, and maintain a 0,8m minimum distance around the boiler. Ensure the necessary space for maintenance and operation of the burner is provided. The boiler installation must be kept clean, dry and well ventilated. The air supply in the boiler installation must be at least equal to the exhaust fumes.
• To minimize the risk of fire do not store flammable materials near the burner.
• Do not leave the appliance exposed to weathering.
• Do not install the appliance on heat generating devices (boiler, hot water heater) situated in rooms which are poorly ventilated,unprotected from the weather or very humid; the vent openings of the boiler room must be sized so as to ensure complete combustion.
• The installation of the appliance must be performed by qualified personnel which is authorized in accordance with the current laws and regulations; an incorrect installation can cause damage to people, animals or material assets in respect of which the manufacturer of the product cannot be held responsible.
• Connect the device to an effective earthing system, done in accordance with the current safety laws, in case of doubt of the effectiveness of the earthing system, request a careful check of the electrical system by qualified and certified staff; the manufacturer cannot be held responsible for any damage caused by the failure to earth the appliance.
• Have qualified personnel check that the electrical system is suitable for the maximum power of the appliance, indicated both in this manual and on the plate.
• It is prohibited to use adapters, multiple sockets and/or extensions for the general supply of electricity to the appliance.
• A double pole differential switch is required for the connection to the electricity grid, as prescribed by the current safety regulations.
• Do not touch the appliance with wet hands and /or bare feet.
• The use of the appliance by young children or inexperienced people is prohibited.
• Do not use the container, the auger or any other part of the appliance as an earthing system for electric devices.
• The power cord of the appliance and the electrical framework/burner/generator of heat/supply grid interface connectors must not be replaced by the user; in case of damage to the cable or to a connector, contact only qualified and trained personnel.
• When the appliance is not used for a certain period of time, the electrical supply needs to be disconnected from all the components of the appliance that use electricity; the pellet container needs to be emptied.

1.3 PRODUCT DESCRIPTION

The machine is a device consisting of the following parts:
• A burner equipped with an igniter, a fan and photoresistant system;
• A fuel supply system consisting of an auger and a flexible tube for loading the pellets into the burner ;
• A fuel storage container ;
The operation, run by a microprocessor (programmer), consists of the following phases:
1. Cleaning phase of the heat generator combustion chamber, achieved by the star ting of the fan in conjunction with the mechanical cleaning system;
2. Loading phase of a preset quantity of pellets, achieved by the star ting of the auger electric motor.
3. Start up phase: the igniter starts up the combustion;
4. Production phase, during which the burner is fueled with preset quantities of fuel according to the combustion power ; during this phase the combustion chamber is maintained under negative pressure (vacuum), the igniter is switched off and the combustion is regulated by the fan which doses the quantity of combustive air in the burner.

1.3.1 DESCRIPTION OF THE BURNER

Extremely versatile, capable of being employed for a wide range of uses, from the installation on new generation boilers to the transformation of old boilers.
Advanced design and technology, with high reliability and construction qualities able to self manage the entire heating system using an electronic card.
fully automatic.
reliable turning on and off due to a sensor and a photoresistance.
manufactured with cer tified high quality materials as the parts directly in contact with the heat are made of high temperature resistant steel.
electronic self regulation based on the fuel used.

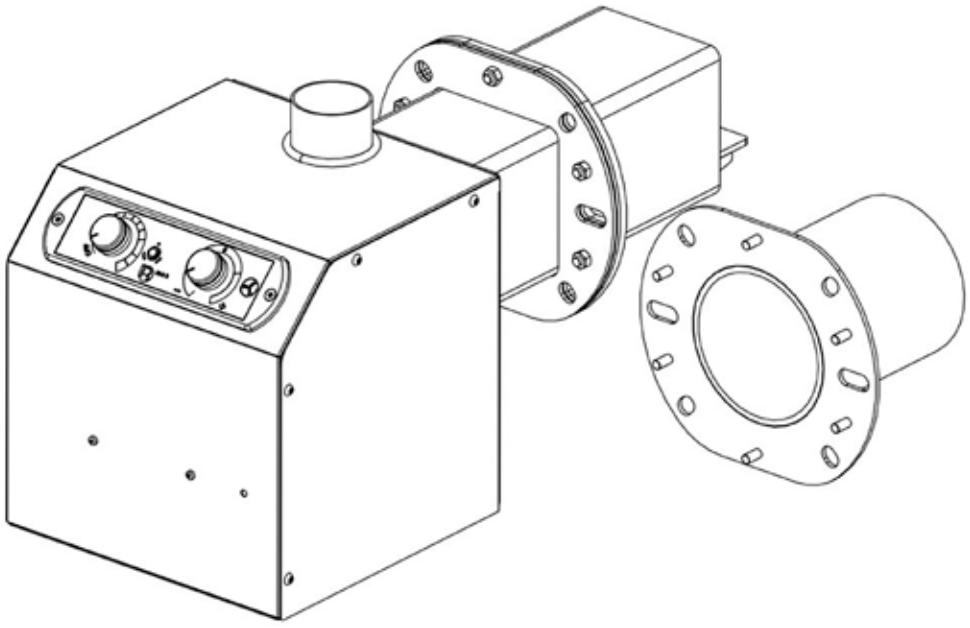


Fig. 1. Burner

1.3.2 DESCRIPTION OF THE COCHLEA SUPPLYING THE PELLETS.

The pellets supplying device was designed using a cochlea system composed as follows:

- High breakaway torque gearmotor;
- Electrical connection cable, complete with connector;
- Guided rigid type spiral;
- Varnished steel tube;
- Flexible tube for the connection between the auger and the burner;
- Independent fan;

Fig. 2. Auger

1.3.3 PELLET TANK DESCRIPTION

The supply tank is composed as follows:

- Fully removable sides and bottom;
- Conical bottom;
- Hinged lid that can be opened;

Every part is made of varnished steel.

Fig. 3. Tank

1.4 PACKAGING CONTENTS

1. BURNER
2. COMBUSTION GRATE
3. O-RING
4. POWER CABLE
5. WATER SENSOR CABLE
6. FLEXIBLE TUBE
7. PELLET LOADING AUGER
8. USER MANUAL

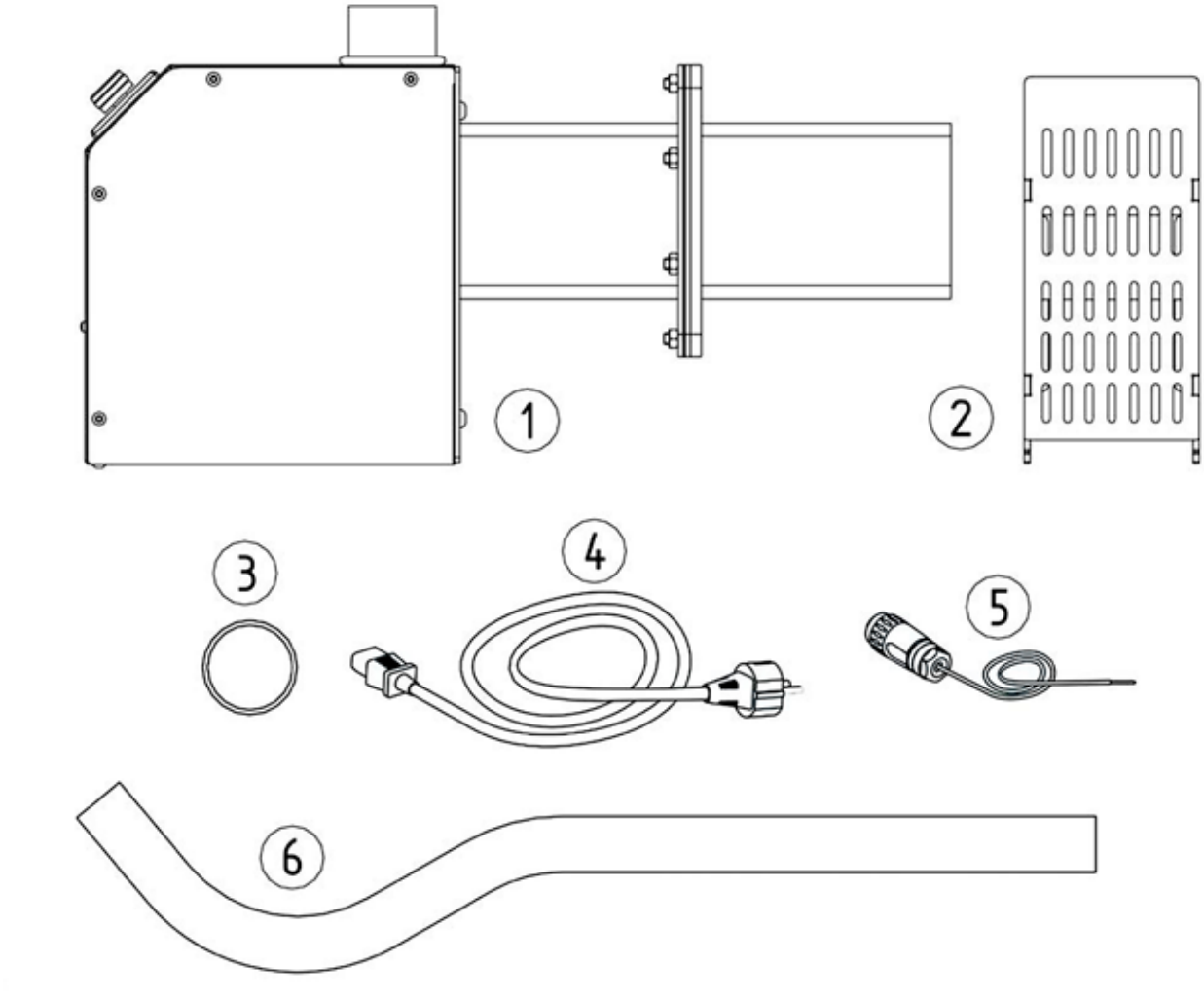


Fig. 4. Packaging contents

2. TECHNICAL FEATURES

2.1 TECHNICAL SPECIFICATIONS OF THE BURNER

Model			B - Home	
Power of the burner		KW	12 - 25	
Average energy consumption		W	60	
Supply voltage		V	230 V-50 HZ	
Combustion Height	Height	mm	ø106	100
	Width	mm		100
	Length	mm	270	310
Start up		W	350	
Flame height		mm	100	
Sound level		dB	30	
Burner weight		Kg	13	
Wood pellets		mm	6 Din Plus	
Minimum recommended size of boiler combustion	Height	mm	300	
	Width	mm	300	
	Length	mm	300	
Pellet supplying auger		mm	1700	
Chimney flue draught		Pa	20	
Performance		%	More than 91% when integrated with a boiler efficiency minimum 80%	

2.2 BURNER OVERALL DIMENSIONS

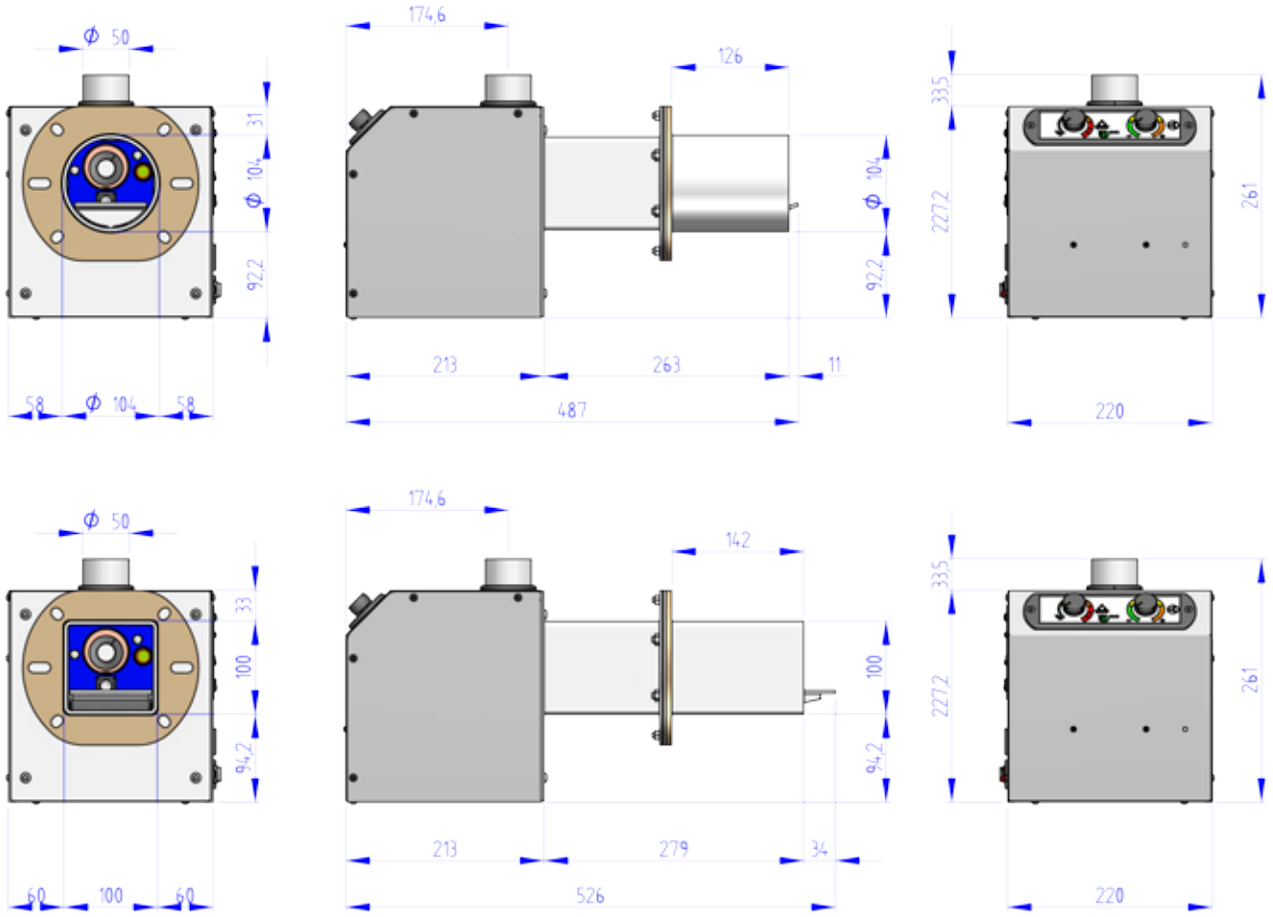


Fig. 5. Burner dimensions

2.3 HATCH OPENING DIMENSIONS

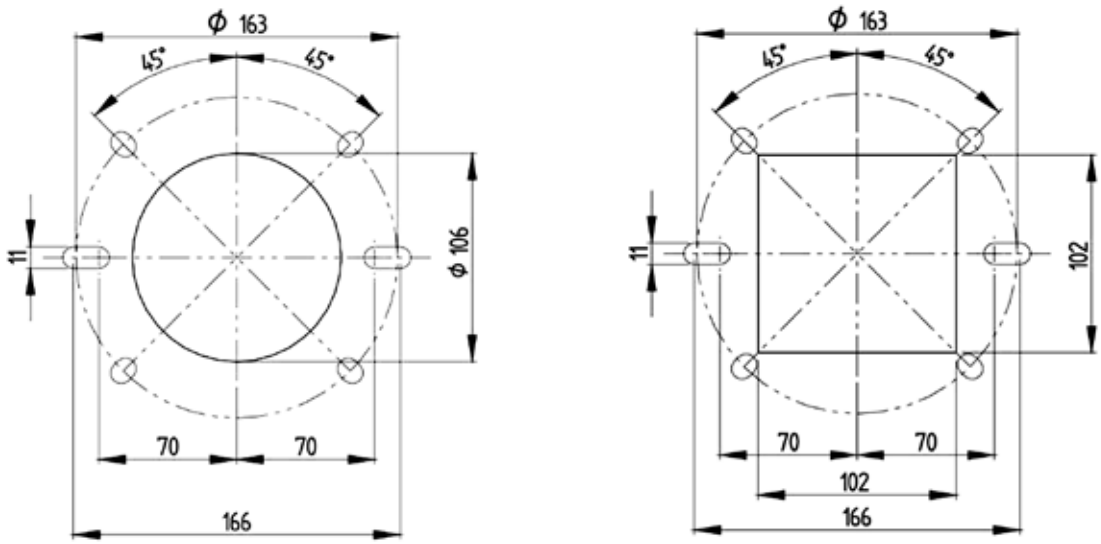


Fig. 6. Opening dimensions

2.4 PELLET LOADING AUGER OVERALL DIMENSIONS

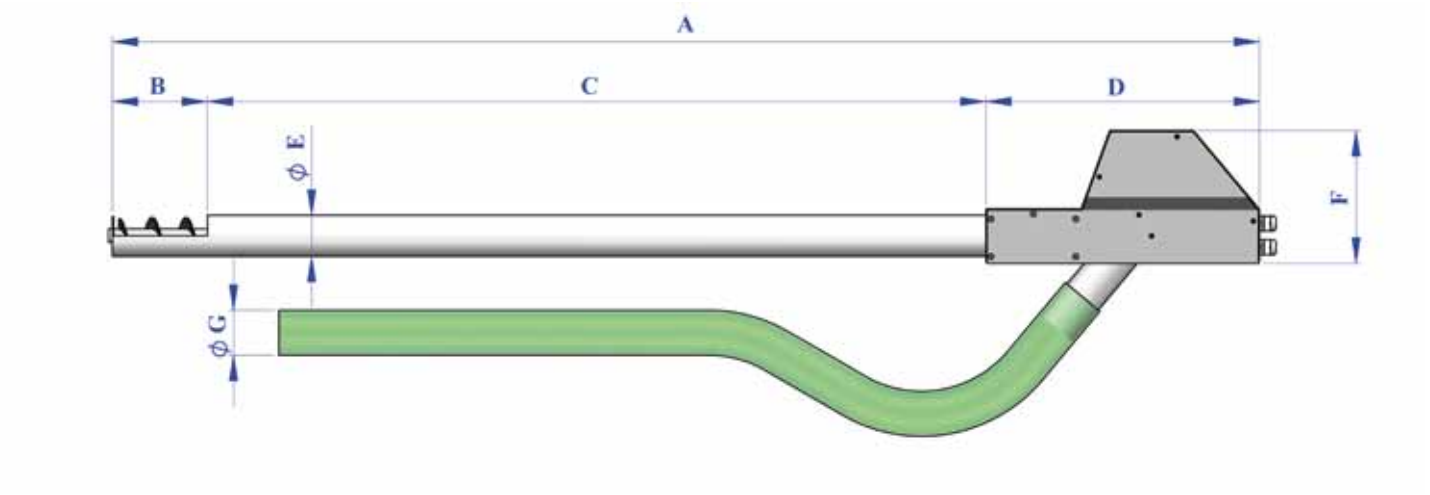
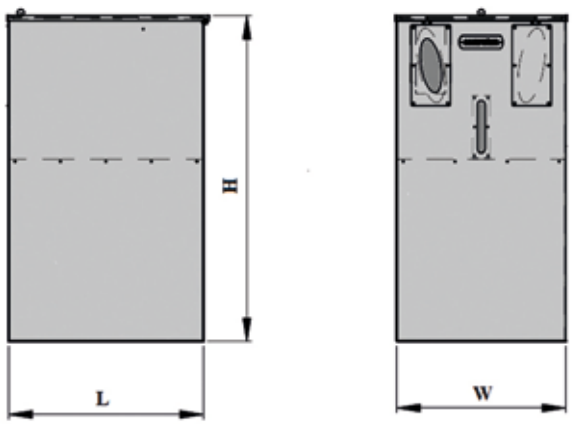


Fig. 7 Pellet loading auger dimensions

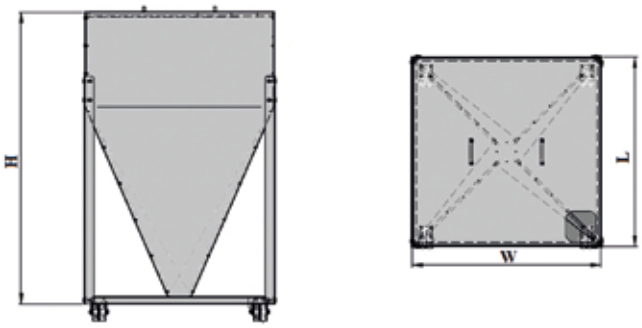
Modello	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
EBL0001-P00	1690	140	1147	403	60	215	66

2.5 PELLET TANK OVERALL DIMENSIONS



MODELLO	CAPACITÁ [KG]	H [mm]	L [mm]	W [mm]
EBT0001-P00	300	1252	750	650

Fig. 8 Tank dimensions



Model	Storage Capacity [KG]	H [mm]	L [mm]	W [mm]
EBT0002-P00	300	1230	799	799

Fig. 9 Tank dimensions

3. TRANSPORTATION

Device	Mode of packing	Mode of lifting	Remarks
BURNER	CORRUGATED CARDBOARD BOX	MECHANICAL MEANS OR AT LEAST 2 PEOPLE	FRAGILE - DO NOT TURN OVER HANDLE WITH CARE
COCHLEA	CORRUGATED CARDBOARD BOX	MECHANICAL MEANS OR AT LEAST 1 PERSON	HANDLE WITH CARE
PELLET TANKS	CORRUGATED CARDBOARD BOX	MECHANICAL MEANS OR AT LEAST 3 PEOPLE	HANDLE WITH CARE

⚠	DURING THE INITIAL STAGE OF LIFTING, CHECK THAT THE MACHINERY IS IN THE CORRECT POSITION SO AS TO KEEP IT IN A BALANCED POSITION.

4. ASSEMBLY AND CONNECTION

4.1 INSTALLATION OF THE BURNER ON THE BOILER

Checks must be carried out at the first start up and after any maintenance operation which has needed the disconnection of the appliance, an intervention on the safety system or on parts of the burner

⚠	WARNINGS: THE BURNER YOU ARE ABOUT TO USE WAS DESIGNED TO FUNCTION ESCLUSIVELY WITH HEAT GENERATORS THAT HAVE A NEGATIVE PRESSURE COMBUSTION CHAMBER, HENCE A DIFFERENT USE MAY CAUSE FIRE HAZARD..

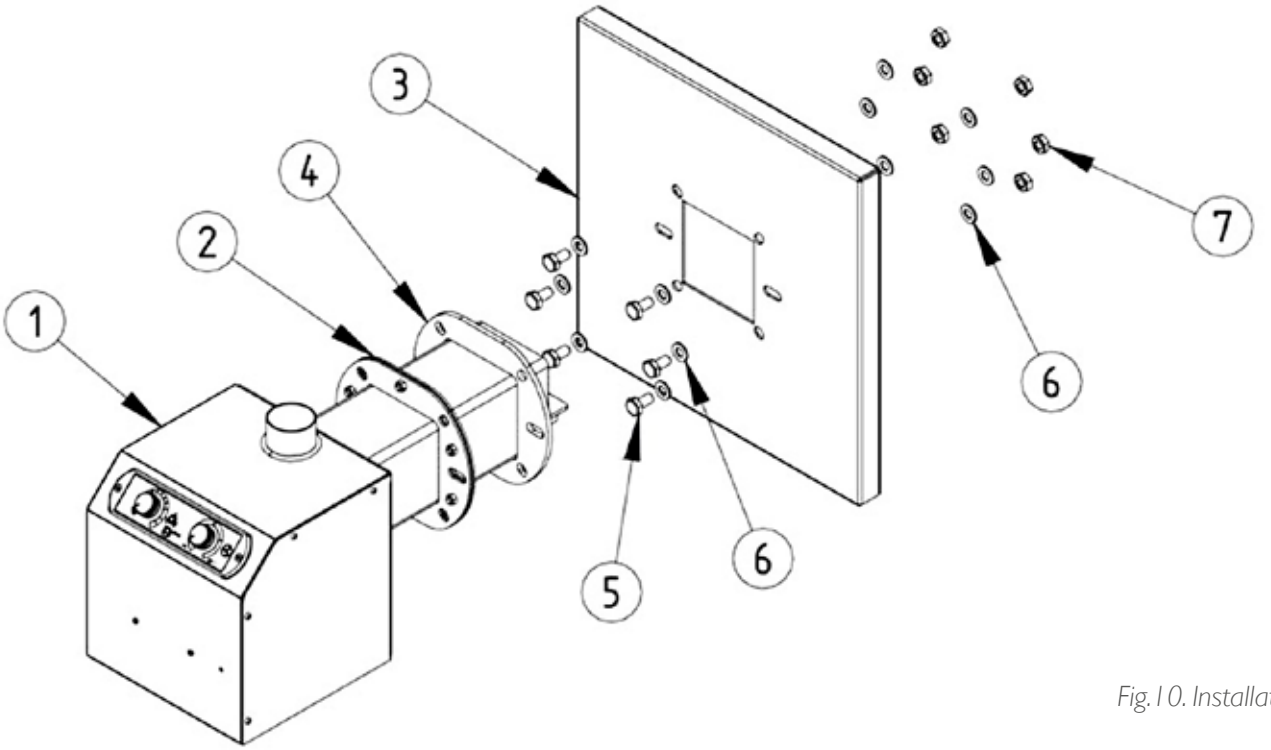


Fig. 10. Installation

1. BORE THE LODGING HOLE AS IN FIGURE "10"
2. INSERT THE BURNER (1) SO AS TO REST IT ON THE FLANGE (2) ON THE DOOR (3)
3. MAKE SURE THAT THE SEAL INCLUDED (4) IS PLACED BETWEEN THE FLANGE AND THE DOOR
4. INSERT AND SCREW UP THE M10 SCREWS (5) + WASHERS (6) + NUTS (7)

5. START UP

5.1 BEFORE STARTING UP THE BURNER

» Check that the burner is fixed correctly onto the boiler according to the factory configured calibrations.
» Check that the boiler and the system are filled with water or diathermic oil, that the valves of the hydraulic system are open and that the smoke exhaust duct is free and properly sized.
» Check that the boiler door is closed, so that the flame is only generated inside the combustion chamber.
» Check the correct positioning of the auger and of the flexible tube connecting it to the burner.
» Fill the pellet container.
» Check the correct positioning and connection of the temperature sensor.

5. 2 FIRST START UP

This operation has to be carried out by qualified and authorized personnel.

Procedure:

1. Fill the fuel container with pellets (done by the user).
2. Power by switching on the On/Off main power button, no. 1 (see fig. 12) and check that the display is turned on.
3. Press button no. 4 (see fig. 12) to start up the fuel supplying auger, and keep it pressed down until the auger itself is full (to check that the auger is full it is sufficient to verify that the pellets have begun to flow from the discharge connection of the auger, through the flexible pellet feeding tube, to the burner); when the auger is full release button no.4.
4. Start up the burner by pressing the On/Off no.1 button for 4 seconds (see fig. 11);
5. It should start up after 4-5 minutes.
6. After start-up, the LED no.2 (see fig. 11) will flash 5 times.

	CALIBRATION OF THE FLOW OF FUEL FOR THE POWER REQUIRED BY THE HEAT GENERATOR.
	CALIBRATION OF THE COMBUSTION AIR AND FUEL RATIO IN ORDER TO ALLOW A CORRECT COMBUSTION AND TO REACH A PERFORMANCE AT LEAST EQUAL TO THE MINIMUM PRESCRIBED BY CURRENT REGULATIONS.
	CHECK OF THE PROPER FUNCTIONING OF THE CONTROL AND SAFETY DEVICES.
	CHECK OF THE PROPER FUNCTIONING OF THE COMBUSTION PRODUCT EXHAUST DUCT.
	AT THE END OF THE CALIBRATION OPERATIONS, CHECK THAT ALL THE MECHANICAL CONTROL SYSTEMS ARE LOCKED AND SECURED.

5. 3 SWITCHING OFF

Turn the regulation potentiometer anti-clockwise, no. 1 (see figure 11), and the burner will immediately start the shut-down phase, interrupting the pellet feeling.

5. 4 FURTHER IGNITIONS

Turn the regulation potentiometer clockwise, no. 1 (see figure 11) to start up the ignition phase, which will take place after 4-5 minutes.

6. FUNCTIONING OF THE DEVICE AND USER GUIDE

6.1 OPERATOR - USER

The device functions fully autonomously, without the need of the constant intervention of an operator. The user acts as the operator of the device. He carries out the first start up. After having started up the device, he should perform all the checks, monitor its proper functioning, and if necessary, proceed to switch it off.

INTENDED USE

	THE DEVICE IS DESIGNED AND BUILT TO OPERATE ONLY AFTER BEING CORRECTLY INSTALLED ON A HEAT GENERATOR (BOILER, HOT WATER HEATER). ANY OTHER USE IS TO BE CONSIDERED IMPROPER.
	THE DEVICE IS DESIGNED AND BUILT TO BURN WOOD PELLETS WHICH DO NOT CONTAIN SAWDUST AND HAVE THE FOLLOWING FEATURES: Lower calorific value — 5 kWh/kg Density — 650 kg/m³ Moisture percentage — 8% of the weight (max) Ash percentage — 1% of the weight (max) Diameter — 6 mm Length — 25 mm (max)
	THE USER MUST GARANTEE THE PROPER ASSEMBLY OF THE DEVICE, ENSTRUSTING THE INSTALLATION TO QUALIFIED AND CERTIFIED PERSONNEL, AND HAVING THE FIRST START UP DONE BY AN SERVICE CENTER AUTHORIZED BY THE MANUFACTURER.
	DO NOT EVER OPEN OR REMOVE ANY COMPONENT OD THE DEVICE.
	THE DEVICE IS DESIGNED AND BUILT TO FUNCTION ESCLUSIVELY WITH HEAT GENERATORS THAT HAVE A NEGATIVE PRESSURE COMBUSTION CHAMBER. DIFFERENT USES MAY CAUSE FIRE HAZARD.

	IMPORTANT: WE RECOMEND THE USER TO USE GOOD QUALITY PELLETS, BECAUSE LOW QUALITY PELLETS DETERMINE LOWER HEAT OUTPUTS, A HIGHER ASH CONTENT, CREATING THE NEED FOR MORE FREQUENT CLEANINGS, A CHANCE OF EARLY WEAR OF THE COMPONENTS OF THE BURNER EXPOSED TO THE FLAME, OBSTRUCTIONS OF THE COCHLEA AND OF THE BURNER DUE TO THE EXCESS OF DISSOLVED SAWDUST, SHUT DOWNS DUE TO THE SEDIMENTATION OF NON-COMBUSTIBLE MATERIALS INSIDE THE BURNER.

6.2 RESIDUAL RISKS

DEVICE	RESIDUAL RISK	NOTES	SIGNS
Burner	Thermal risk	The surfaces of the burner near the flame, heat both during the pre-start phase and during the functioning; they remain hot even after the burner has been switched off. Therefore there is a risk that a maintenance operator – while removing the burner from the heat generator - may come into contact with the heated surfaces. This risk is managed as residual risk and an appropriate warning is placed on the device.	Do not touch the surface of the burner while it is still hot.

6.3 SAFETY DEVICES INSTALLED

The safety devices installed are:

- A fixed setting thermostat (60 °C) is installed on the fuel supply tube; when the temperature of the tube exceeds the fixed temperature, which derives from a return of heat, the thermostat stops the burner.
- A photoresistance supplied with the burner, which stops the burner if the flame is absent.

6.4 CONTROL PANEL AND DESCRIPTION OF KEYS

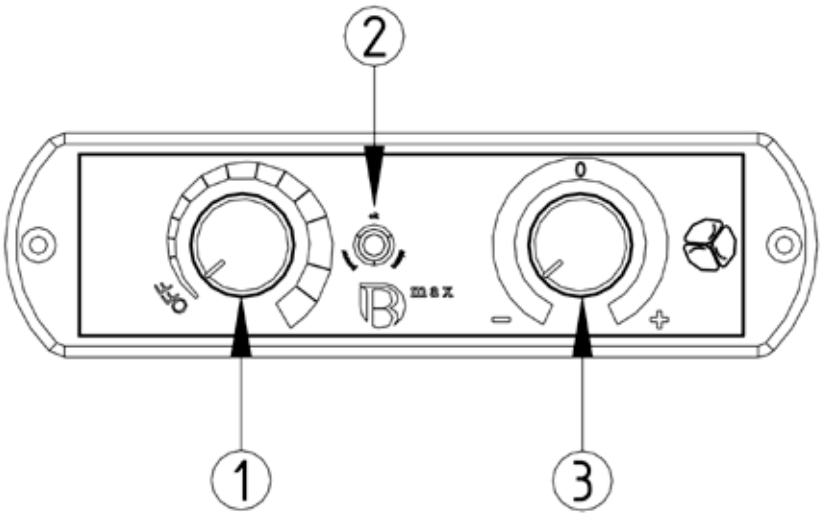


Fig. 11 Control Panel

LEGEND
1. Potentiometer for regulation of burner power (OFF = turned off)
2. Burner function led
3. Potentiometer for regulation of the fan (Increases or Reduces the flow of air to the combustion chamber)

DESCRIPTION OF POTENTIOMETER

START-UP AND SHUT-DOWN

To ignite the burner it is sufficient to turn the potentiomenter outside the first band (off) no.1 (see figure 11), and the card will start up the ignition cycle.
To turn off the burner it is sufficient to turn the potentiometer inside the first band (off); the burner will carry out the shut-down procedure.
The start-up and shut-down phase is indicated by the led which will be green and flashing very fast.(5 flashes per second), no. 2 (vedi fig. 11)..

TEMPERATURE REGULATION

Thanks to the potentiometer, it is possible to programme the temperature of the water. It is sufficient to turn the potentiometer to the position required. The water temperature can be regulated from a temperature of 25° up to a maximum of 90°. According to the temperature programmed, the card adjusts the power level in line with the current water temperature, from power level "5" to power level "1", when the actual water temperature reaches the temperature programmed.

Difference Between Temperature Set – Actual Temperature	Card Power Level	LED Signal
5°	5	Green 5 flashes
4°	4	Green 4 flashes
3°	3	Green 3 flashes
2°	2	Green 2 flashes
1°	1	Green 1 flash
0°	1 (modulation)	Green - steady, no flashing

When the water temperature is inferior to the temperature programmed, the led will be green and will flash according to the power calculated (see table above). Once the temperature programmed is reached, the led will be green and the light will be steady with no flashing.

LED DESCRIPTION

Thanks to the LEDs which use the new "multi-colour" technology, it is possible to diagnose the state of the burner, and the alarms which are active, in real time. In the table below, we describe the state of the LEDs and their relative meaning.

LED Colour	Flashing Type	Meaning
Green	Slow flashing	Burner off no alarm
Green	Fast flashing	Burner in start-up or shut-down phase
Green	1 flash	Burner on regulated at power 1
Green	2 flashes	Burner on regulated at power 2
Green	3 flashes	Burner on regulated at power 3
Green	4 flashes	Burner on regulated at power 4
Green	5 flashes	Burner on regulated at power 5
Green	Steady – no flashing	Burner on, set temperature reached
Red	1 flash	Low fuel level alarm
Red	3 flashes	Water probe alarm
Red	4 flashes	Start-up failure alarm
Red	5 flashes	Black-out alarm
Red	7 flashes	Water temperature high alarm (t>90)

ALARM MESSAGES

The flashing of the led indicates the present alarm situation.The action which the card initiates in accordance with the alarm input and the current phase of the burner is indicated below.
In the case of the low fuel level alarm, the water probe alarm or the water temperature alarm, the burner will shut down.
In the case of a black-out, the burner will try to reactivate itself on the basis of the data transmitted from the photo sensor resistance.
In the case of a failed start-up, the burner will try to re-ignite up to the maximum number of attempts programmed by the installer.
To reset an alarm, it is necessary to wait until the burner has shut down, and then the potentiometer must be positioned in the OFF position. If the alarm phase is resolved, the led will become green again.

AIR CORRECTION

The secondary potentiometer for air correction, no.3 (see fig. 11) manages the operational speed of the fume extractor: by turning it to the left, it will diminish the air flow, while turning it to the right will increase the air flow.

7. FAULTS - CAUSES - SOLUTIONS

The burner is equipped with a self diagnosis system, which, in case of a fault to the burner, displays the following messages on the display.
In the following table are indicated the most common faults with their possible solutions.

FAULT	CAUSE	SOLUTION
FAILED START UP	Pellet tank empty	Fill the tank
	Auger cable disconnected or interrupted	Restore the connection or find the interruption
	Ignition resistance faulty	Substitute the resistance (call a qualified technician)
	Combustion grate clogged	Remove grate and clean it
	Internal power supply of the auger clogged	Check that the auger which clogged combustion chamber is not for some reason clogged
BLACK OUT ALARM	Power failure	Restore power. If after having restored the power the alarm continues, call a qualified technician.
WATER SENSOR FAULTY ALARM	Sensor badly connected	Check connection
	Sensor faulty	Change the sensor
FUEL EMPTY ALARM	Pellet tank empty	Fill the tank
	Auger cable disconnected or interrupted restore the connection or find the interruption	Restore the connection or find the interruption

N.B. = SE IL PROBLEMA PERSISTE PER LE ANOMALIE DESCRITTE NON CERCARE NUOVE SOLUZIONI OLTRE AI RIMEDI ELENCATI PER NON PROVOCARE DANNI IRREPARABILI AL BRUCIATORE NON COPERTI DA GARANZIA, MA RIVOLGERSI AD UN TECNICO SPECIALIZZATO.

8. ELECTRICAL CONNECTIONS

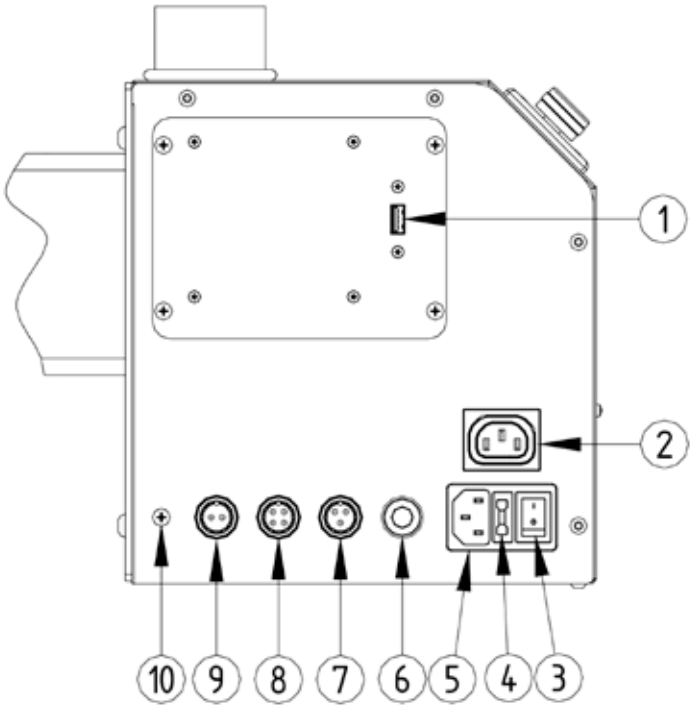


Fig. 12 Electrical connections

Legend
1. USB port to connect to the parameter setting display
2. 24 volt power outlet for loading coclea fan
3. Main ON-OFF power switch
4. Fuse
5. 220 volt power connection
6. Manual pellet loading switch
7. Motor power 1 (external loading coclea)
8. Water probe connection
9. Environment Thermostat connection
10. Earthing connection

8.1 ELECTRICAL CONNECTION

⚠	THE ELECTRICAL CONNECTION OPERATIONS SHOULD BE DONE BY A TRAINED ELECTRICIAL, APPROVED BY THE MANUFACTURER..

⚠	DO NOT EXPOSE THE OUTER CASING OF THE ELECTRICAL PANEL TO DRIPS AND JETS OF WATER AND /OR DUST.

8.2 WIRING DIAGRAM

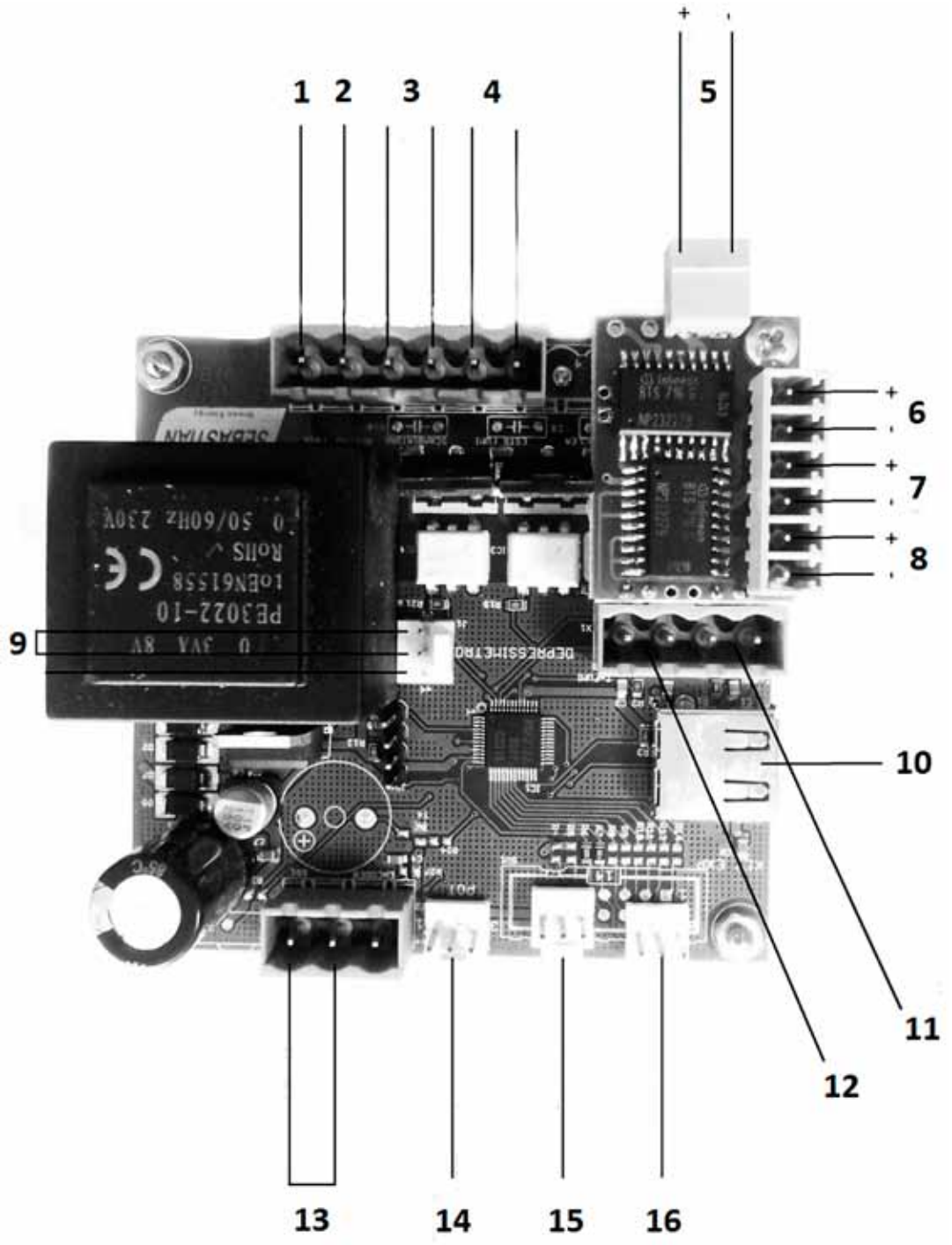


Fig. 13. Wiring diagram

	DESCRIPTION
1	Phase
2	Neutral
3	Resistance
4	Burner fan
5	Motor 1 fan
6	24V
7	Motor 1
8	Motor 2
9	External thermostat
10	PC connection serial port
11	Water temperature
12	Photoresistor
13	Pellet loading switch
14	Potentiometer for water temperature programming
15	Air correction potentiometer
16	LED

9. MAINTENANCE

- Check periodically that those parts of the burner that tend to get dirty due to bad quality pellets or due to the incorrect setting of the burner, are clean.
- The burner requires periodic maintenance, we recommend a weekly cleaning of the combustion grate by the user.
- Furthermore, request authorized personnel to perform ANNUALY maintenance operations

	THE PELLET TANK SHOULD BE PLACED IN SUCH A WAY AS TO AVOID ANY KINKING AND /OR BENDS OF THE FLEXIBLE TUBE CONNECTING THE AUGER AND THE BURNER, THUS ENSURING THE FLOW OF PELLETS. IN ADDITION, AT BOTH ENDS OF THE FLEXIBLE TUBE FASTEN THE TUBE CLAMPS PROVIDED WITH THE BURNER.

9.1 GENERAL MAINTENANCE

	ANY INTERVENTION ON THE ELECTRICAL PARTS INSIDE THE BURNER AND THE AUGER SHOULD BE DONE BY QUALIFIED AND AUTHORIZED PERSONNEL.

	THE MAINTENANCE OPERATIONS SHOULD BE PERFORMED BY QUALIFIED AND AUTHORIZED PERSONNEL.

SAFETY PROCEDURE FOR THE APPLIANCE

1. Check that the device has been switched off using the shutdown procedure.
2. Set on "Off" potentiometer no.1 (see fig. 11) and cut the power to the device selecting the bipolar button
3. Cut and isolate the fuel supply.

	THE PROCEDURE OF SECURING THE DEVICE AND RESETTING NORMAL OPERATIONAL CONDITIONS, SHOULD BE DONE ONLY BY THE MAINTENANCE OPERATOR.

9.2 MAINTENANCE OPERATIONS TABLE

During the first start up, after an hour of operation, the burner should be switched off and the grate should be checked for the presence of unburned materials; in the case of unburned materials modify the setting of the air and fuel combustion parameters.
The data given in the following table is approximate and related to the use of certified pellets.
In case of use of non-certified pellets, not knowing the quality of the material and its composition, it is not possible to determine the frequency of cleaning.
In the case of use of non-certified pellets, Elmec s.r.l disclaims all liability for any faults, damage and possible environmental damage.
WARNING: Please note that the incorrect cleaning also affects the wear and tear on the parts of the burner exposed to the fire.

	If required	7days	14 days	30 days	1/2 year	Every year
Cleaning of the combustion chamber in case of ash deposit	×	×	×			
Cleaning of the space under the grate from dust and ash			×	×		
Cleaning of the fan					×	×
Cleaning of the burner and of the boiler	×		×	×		
Cleaning of the chimney flue and of the rear of the boiler	×			×	×	
Check to identify and replace worn parts						×
Adjust the combustion process	×					
Fill the pellet tank	×	×	×			
Cleaning of the chimney flue						×

This program is merely informational, and if necessary the clearing activity should be constant. The cleaning varies according to the situation, because the choice of pellets, the system and the burner setting have a major impact on the frequency of cleaning intervals.

9.3 SPECIAL MAINTANANCE

Special maintenance should be done at the end of the season, and in any case once a year. The maintenance operations to perform are the following:

- Clean all the components of the burner, grate and nozzle etc.;
- Clean and check that the flame check photoresistance is operating correctly;
- Check the correct operation of the igniter;
- Check the bearings and possible cleaning;
- Oil of the auger bearings;
- Clean the fan;
- Empty and clear the pellet tank;
- Check the condition of the flexible tube connecting the auger and the burner, and if necessary replace it;
- Check the condition of the electric power supply cables and electrical connectors, and if necessary replace them; such replacement should only be performed by qualified and authorized personnel for this type of operation.

10. SPARE PARTS

For each maintenance operation which involves the replacement of parts of the device, please refer to the reference drawings. WARNING: The spare parts for which a claim is being made under the warranty agreement should not be tampered with, but simply removed from the device and sent to headquarters for the necessary verifications.

	THE USE OF THE DEVICE UNDER BAD MAINTENANCE CONDITIONS CAN RESULT IN THE APPLIANCE OPERATING IN UNPREDICTABLE AND EXTREMELY DANGEROUS CONDITIONS.

11. DISPOSAL

Most of the device is made of steel and commercial components in general, which do not require special instructions for their disposal.
Careful attention should be paid to the disposal of oils and grease in general, which must be disposed according to the current regulations for used oils.
The disposal of plastic parts should be managed similarly.
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	FOR THE DISPOSAL PLEASE CONSULT AUTHORIZED COMPANIES.

13. WARRANTY CERTIFICATE

1. Definitions

1.1 The following definitions have been adopted in the present document: B-max Technology (a division of Elmec Group) will herewith be referred to as the "Company"; the person or company to which the present document is addressed will herewith be referred to as the "Buyer"; all the material goods or services the Buyer intends to purchase by signing the present contract will herewith be referred to as the "Goods";

2. Object of the warranty and duration

2.1 The manufacturing company hereby guarantees the machinery sold as regards all manufacturing and working defects for 12 (twelve) months from the delivery date, which is documented by means of a regular document of purchase;

3. Modalities for claiming against the present warranty

3.1 In the event of a fault, the client can contact the installer, and ask him to intervene;

3.2 Any faults and/or malfunctions must obligatorily be communicated within 8 days of their discovery;

3.3 The costs of the work are to be sustained by the manufacturer, apart from the exclusions foreseen and described in the present Declaration;

3.4 Unless a different agreement has been reached, the Goods under warranty will be repaired and/or substituted for free; it should be understood that all the costs for travel, transfer, transport, possible disassembly and reassembly of the Goods and the costs of inspection both in Italy and abroad will be charged to the Buyer in line with current prices at the moment of execution;

3.5 The Warranty will not be valid, however, if the Buyer does not respect the terms of payment of the Goods supplied by the Company or of any accessory services supplied by the latter;

3.6 If the operational conditions of the warranty come into force, this does not give the Buyer the right to claim any compensation and/or indemnity for direct or indirect damage of any kind deriving from the lost use of the Goods;

3.7 The choice of the type of action to take if the Warranty comes into force is at the discretion of the Company, whether the Goods are repaired, substituted or there is reimbursement of money which could be paid in one single payment or by installments;

3.8 All the costs of the actions taken by the Buyer on his own initiative without the explicit written agreement of the company will be sustained by the Buyer;

3.9 The Warranty refers to the Goods. Responsibility for the successful use of the Goods and their integration into the plants is entirely that of the Buyer;

3.10 Any actions carried out under the Warranty do not modify the starting date or the duration of the Warranty;

3.11 B-max Technology reserves the right to decide if the Warranty is applicable to the defective merchandise;

3.12 It is understood that the version in Italian of the present document will be considered decisive.

4. Exclusions

Any damage caused by the following factors is to be excluded from the present Warranty:

4.1 Transport;

4.2 Non-observance of the instructions and the warnings issued by the manufacturer and stated in the User's Manual supplied with the product;

4.3 Incorrect installation or non-observance of the installation instructions provided by the manufacturer and stated in the installation manuals supplied with the product;

4.4 Non-observance of the norms and/or regulations stipulated by the current laws and/or regulations, in particular the absence or insufficient periodical maintenance;

4.5 Abnormalities or anomalies of any kind in the feeding of the hydraulic and electrical plants, in the supply of the fuel, in the chimneys and/or the smoke outlets;

4.6 Incorrect treatment of the ducts;

4.7 Corrosion caused by condensation or water damage;

4.8 Ice, stray currents and/or lightning;

4.9 Absence of lightning protection devices;

4.10 Negligence, incompetence, interventions carried out by unauthorized personnel or incorrect technical interventions carried out on the product by any third party;

4.11 Parts subject to normal wear and tear;

4.12 Causes of "force majeure" which are independent of the will and the control of the manufacturer.

5. Responsibilities

5.1 The personnel authorized by the manufacturer will carry out technical assistance for the Client; the installer will nevertheless be solely responsible for the installation, which must respect the legal and technical requirements stated in the installation manuals supplied with the product.

5.2 No third party is authorized to modify the terms of the present Warranty nor to issue any reports or written documents.

6. Legal rights

6.1 The present Warranty is in addition to and does not prejudice the rights of the Buyer stipulated in the Directive 99/44/CEE and the relative national implementation laws;

6.2 For any controversy the Vicenza law courts will be competent.

7. Instructions for compilation of the Warranty

7.1 Fill in Section A below with the relevant personal data.

7.2 At the moment of the first ignition the installer must fill in Section B, and place the sticker with the bar coding on the inside of the appliance.

A

PART TO BE FILLED IN BY THE CLIENT

CLIENT DATA

Surname

Name

Street Nr.

Postal Code Town

B

PART TO BE FILLED IN BY THE CUSTOMER SERVICE CENTRE

DATE OF FIRST IGNITION / /

DATE OF DELIVER / /

Stamp and signature of the Installation Service Manager

12. DECLARATION OF CONFORMITY

ELMEC GROUP Srl

Assemblaggi Industriali, lavorazione lamiere

Località Ca' D'oro
36020 Asigliano Veneto (VI)

Tel 0444/772023 Fax 0444/773129

Iscr. Reg. Imprese (VI) Cod. Fiscale & P.IVA: 03725780245
www.elmec-online.net e-mail: info@elmec-online.net
www.b-max.com e-mail: info@b-max.com

DECLARATION OF CONFORMITY

CE

ELMEC GROUP Srl, declares that the projects and construction of pellet burners, codes: EBB0025, EBB0034, EBB0050, EBB0100, EBB0200, EBB0300 , power 25kW, 34/50kW, 100kW, 200kW and 300kW, are in compliance with the following norms:

- Machinery Directive (2006/42/CE)
- Low Voltage Directive (2006/95/CEE)
- EMC (2005/65/CE)

Which technical documents are stored in our office

Asigliano Veneto, 15/10/2012

Elmec Group Srl

Federico Marcante (CEO)

ELMEC GROUP S.R.L.
Loc. Ca' d'Oro • 36020 • Asigliano Veneto (VI)
ITALY

Tel + 39 0444 772023
Fax +39 0444 773129
Mail info@b-max.com
Web www.b-max.com

max
technology
GREEN HEATING SOLUTIONS